

Title (en)

IMAGE COMPONENT PREDICTION METHOD, ENCODER, DECODER, AND STORAGE MEDIUM

Title (de)

BILDKOMPONENTENVORHERSAGEVERFAHREN, CODIERER, DECODIERER UND SPEICHERMEDIUM

Title (fr)

PROCÉDÉ DE PRÉDICTION DE COMPOSANTE D'IMAGE, ENCODEUR, DÉCODEUR ET SUPPORT D'INFORMATIONS

Publication

EP 3817390 A4 20210929 (EN)

Application

EP 20836842 A 20200515

Priority

- US 201962872488 P 20190710
- US 201962872830 P 20190711
- US 201962873170 P 20190711
- CN 2020090688 W 20200515

Abstract (en)

[origin: EP3817390A1] The embodiments of the application provide a method for colour component prediction, an encoder, a decoder and a storage medium. The method includes that: prediction parameters of a current block are determined, the prediction parameters including a prediction mode parameter and a size parameter of the current block; when the prediction mode parameter indicates that a Matrix-based Intra Prediction (MIP) mode is adopted to determine an intra prediction value of the current block, an MIP weight matrix of the current block, a shift factor of the current block and an MIP input sample matrix of the current block are determined; and the intra prediction value of the current block is determined according to the MIP weight matrix, the shift factor and the MIP input sample matrix.

IPC 8 full level

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CPC (source: CN EP IL KR US)

G06F 5/01 (2013.01 - KR US); **G06F 17/16** (2013.01 - KR US); **H04N 19/105** (2014.11 - CN EP KR); **H04N 19/11** (2014.11 - KR);
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H04N 19/42 (2014.11 - CN EP KR); **H04N 19/59** (2014.11 - CN EP); **H04N 19/593** (2014.11 - CN EP IL KR)

Citation (search report)

- [X] BROSS B ET AL: "Versatile Video Coding (Draft 5)", no. JVET-N1001, 2 July 2019 (2019-07-02), pages 1 - 406, XP030220731, Retrieved from the Internet <URL:http://phenix.int-evry.fr/jvet/doc_end_user/documents/14_Geneva/wg11/JVET-N1001-v10.zip> [retrieved on 20190702]
- [X] "Test Model 5 of Versatile Video Coding (VTM 5)", no. n18371, 7 July 2019 (2019-07-07), XP030222341, Retrieved from the Internet <URL:http://phenix.int-evry.fr/mpeg/doc_end_user/documents/126_Geneva/wg11/w18371.zip> [retrieved on 20190707]
- [X] J-Y HUO ET AL: "Non-CE3:Fixed downshifting for 8-bit MIP", no. JVET-O1127, 7 July 2019 (2019-07-07), XP030293849, Retrieved from the Internet <URL:https://jvet-experts.org/doc_end_user/documents/15_Gothenburg/wg11/JVET-O1127-v2.zip> [retrieved on 20190707]
- [PX] KONDO (SONY) K ET AL: "CE3-2: On rounding shift of MIP", no. JVET-P0056 ; m49976, 18 September 2019 (2019-09-18), XP030216081, Retrieved from the Internet <URL:http://phenix.int-evry.fr/jvet/doc_end_user/documents/16_Geneva/wg11/JVET-P0056-v1.zip> [retrieved on 20190918]
- See also references of WO 2021004155A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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BA ME

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EP 3817390 A1 20210505; EP 3817390 A4 20210929; AU 2020310350 A1 20210422; BR 112021005760 A2 20210629;
CA 3113740 A1 20210114; CN 112655215 A 20210413; CN 113225562 A 20210806; CN 113225562 B 20230530; CN 116389724 A 20230704;
CN 116389725 A 20230704; IL 281619 A 20210531; JP 2022539937 A 20220914; KR 20220030918 A 20220311; MX 2021005855 A 20210715;
PH 12021550522 A1 20220221; SG 11202102925X A 20210429; US 11509901 B2 20221122; US 11909979 B2 20240220;
US 11930181 B2 20240312; US 2021203941 A1 20210701; US 2023013677 A1 20230119; US 2023015739 A1 20230119;
US 2024114142 A1 20240404; US 2024163445 A1 20240516; WO 2021004155 A1 20210114; ZA 202101632 B 20220831

DOCDB simple family (application)

EP 20836842 A 20200515; AU 2020310350 A 20200515; BR 112021005760 A 20200515; CA 3113740 A 20200515;
CN 2020090688 W 20200515; CN 202080004757 A 20200515; CN 202110469722 A 20200515; CN 202310370166 A 20200515;
CN 202310372089 A 20200515; IL 28161921 A 20210318; JP 2021541531 A 20200515; KR 20217022552 A 20200515;
MX 2021005855 A 20200515; PH 12021550522 A 20210310; SG 11202102925X A 20200515; US 202117197327 A 20210310;
US 202217942366 A 20220912; US 202217942437 A 20220912; US 202318532038 A 20231207; US 202418423632 A 20240126;
ZA 202101632 A 20210310